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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/812,843

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Makoto Suzuki

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1428

22428

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09/21/2004

FOLEY AND LARDNER
SUITE 500
3000 K STREET NW
WASHINGTON, DC 20007

EXAMINER

FOX, JAMAL A


ART UNIT

PAPER NUMBER

2664

DATE MAILED: 09/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/812,843	Applicant(s) SUZUKI, MAKOTO	
	Examiner Jamal A Fox	Art Unit 2664	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 March 2001.
2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☒ Claim(s) 15-17 is/are allowed.
6) ☒ Claim(s) 1-4, 7-9, 12 and 18 is/are rejected.
7) ☒ Claim(s) 5, 6, 10, 11, 13, 14, 19 and 20 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 21 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 09/812,843.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>3/21/01 & 11/28/03</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-4, 7-9 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lemieux.

Referring to claim 1, Lemieux discloses in a packet transfer network (Fig. 2) for conducting packet transfer between a first terminal (Fig. 2 ref. sign 226A) and a second terminal (Fig. 2 ref. sign 226B) through a plurality of packet transfer devices (Fig. 2 ref. signs, 218A and 218B) provided between the terminals, a label request packet transmission method of transmitting an original label request packet (packet, col. 5 lines 45-62) for use in determining a label to be used among said plurality of packet transfer devices for the purpose of said packet transfer from a transmission side packet transfer device (Fig. 2 ref. sign 230A) connected to said first terminal and a reception side packet transfer device (Fig. 2 ref. sign 222) connected to said second terminal, comprising the steps of: dividing (muxing, col. 6 lines 48-57) said packet transfer network into a plurality of sections, but does not explicitly teach of dividing the original label request packet into a plurality of label request packets each for each said section and transmitting the divisional packets. However an LDP multiplexing unit is disclosed in Fig. 2 ref. signs 206A, 206B, 206C and 206D. Therefore, it would have been

obvious to one having ordinary skill in the art at the time the invention was made to have included dividing the original label request packet into a plurality of label request packets each for each said section and transmitting the divisional packets for the purpose of providing resources between the aggregate-side nodes and the distribution-side nodes within the access network portion.

Referring to claim 2, Lemieux discloses the label request packet transmission method as set forth in claim 1, wherein division into said plurality of label request packets each for each said section is conducted by a specific representative packet transfer device (Fig. 3 ref. signs 308-1 through 308-N and col. 4 line 61-col. 5 line 3) at a section to which said transmission side packet transfer device belongs.

Referring to claim 3, Lemieux discloses the label request packet transmission method as set forth in claim 2, wherein said specific representative packet transfer device transmits said plurality of divisional label request packets each for each said section directly (directly, col. 5 lines 45-55) to a plurality of other representative packet transfer devices in the remainder of the plurality of sections in parallel to each other.

Referring to claim 4, Lemieux discloses the label request packet transmission method as set forth in claim 2, wherein said specific representative packet transfer device transmits said plurality of division label request packets each for each said section directly (directly, col. 5 lines 45-55) to a plurality of other representative packet transfer devices in the remainder of the plurality of sections in parallel to each other, and each said representative packet transfer device is disposed at a starting point (point

of presence, col. 2 lines 21-63 and col. 3 lines 33-39) of a path in the section to which the representative packet transfer in question belongs.

Referring to claim 7, Lemieux discloses a packet transfer network (Fig. 2) for conducting packet transfer between a first terminal (Fig. 2 ref. sign 226A) and a second terminal (Fig. 2 ref. sign 226B) through a plurality of transfer devices (Fig. 2 ref. signs, 218A and 218B) provided between the terminals, in which a transmission side packet transfer device (Fig. 2 ref. sign 230A) connected to said first terminal transmits an original label request packet (packet, col. 5 lines 45-62) for use in determining a label to be used among said plurality of packet transfer devices for the purpose of said packet transfer to a reception side packet transfer device (Fig. 2 ref. sign 222) connected to said second terminal, wherein said packet transfer network is divided (muxing, col. 6 lines 48-57) into a plurality of partial networks (Fig. 2, Aggregate Portion, Distribution Portion and Access Network Portion) and a specific representative packet transfer device in a partial network to which said transmission side packet transfer device (Fig. 2 ref. sign 230A), and transmission means (Fig. 3 ref. signs 308-1 through 308-N and col. 4 line 61-col. 5 line 3) for dividing (muxing, col. 6 lines 48-57) the packets each for each said partial network, but does not explicitly teach of transmitting the divisional packets. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have included transmitting the divisional packets for the purpose of providing resources between the aggregate-side nodes and the distribution-side nodes within the access network portion.

Referring to claim 8, Lemieux discloses a packet transfer network as set forth in claim 7, wherein said transmission means of said specific representative packet transfer device transmits said plurality of divisional label request packets each for each said partial network directly (directly, col. 5 lines 45-55) to a plurality of other representative packet transfer devices in the remainder of the plurality of partial network in parallel to each other.

Referring to claim 9, Lemieux discloses the packet transfer network as set forth in claim 8, wherein each said representative packet transfer device is disposed at a starting point (point of presence, col. 2 lines 21-63 and col. 3 lines 33-39) of a path in the partial network to which the representative packet transfer in question belongs.

Referring to claim 12, Lemieux discloses a packet transfer network (Fig. 2) for conducting packet transfer between a first terminal (Fig. 2 ref. sign 226A) and a second terminal (Fig. 2 ref. sign 226B) through a plurality of packet transfer devices (Fig. 2 ref. signs, 218A and 218B) provided between the terminals, a label determination method (LDP, col. 5 line 45-col. 6 line 57) of determining a label to be used among said plurality of packet transfer devices for the purpose of said packet transfer, comprising the steps of: dividing said packet transfer network into a plurality of sections (Fig. 2, Aggregate Portion, Distribution Portion and Access Network Portion), dividing (muxing, col. 6 lines 48-57) an original label request packet (packet, col. 5 lines 45-62) for use in determining a label to be used among said plurality of packet transfer devices for the purpose of said packet transfer into a plurality of label request packets each for each said section and individually notifying a result of each section which is a response (response, col. 4 lines

50-60 and col. 8 lines 15-40) corresponding to said plurality of divisional label request packets, but does not explicitly teach of transmitting the divisional packets. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have included transmitting the divisional packets for the purpose of providing resources between the aggregate-side nodes and the distribution-side nodes within the access network portion.

3. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lemieux in view of Matsuzawa.

Referring to claim 18, Lemieux discloses a packet transfer device for use in a packet transfer network for conducting packet transfer between a first terminal and a second terminal through a plurality of packet transfer devices provided between the terminals, said packet transfer device provided between first and second transmission paths for conducting LDP (Label Distribution Protocol) processing, comprising: a first LDP multiplexing and separation unit (Fig. 2 ref. sign 206B) connected to said first transmission path (Fig. 2 see the arrows) for conducting LDP multiplexing and separation, a second LDP multiplexing and separation unit (Fig. 2 ref. sign 206D) connected to said second transmission path (Fig. 2 ref. sign 214) for conducting LDP multiplexing and separation, a packet switch (Fig. 2 ref. sign 212) provided between said first LDP separation unit and said second LDP processing unit, but fails to explicitly teach of a switch connection table connected to the packet switch for controlling a switch connection state of said packet switch, and an LDP processing unit connected to said first and second LDP multiplexing and separation units and said switch connection

table for processing and LDP packet separated at said first LDP multiplexing and separation unit to multiplex a plurality of LDP packets each for each of a plurality of divisional sections obtained by dividing said packet transfer network and sending the multiplexed packet to said second LDP multiplexing and separation unit, as well as updating said switch connection table. Matsuzawa discloses a switch connection table (Fig. 10 ref. sign 1051 and respective portions of the spec.) connected to the packet switch (Fig. 10 ref. sign 1011 and respective portions of the spec.) for controlling a switch connection state of said packet switch, and an LDP processing unit (Fig. 10 ref. sign 1009 and respective portions of the spec.) connected to a switch connection table for processing an LDP packet as well as updating said switch connection table. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to have included the switch connection table and LDP processing unit of Matsuzawa to the invention of Lemieux in order to receive and interpret LDP packets from the LDP multiplexing and separation units based on registered labels in the switch connection table as suggested by Matsuzawa.

Allowable Subject Matter

4. Claims 15-17 are allowed.
5. Claims 5, 6, 10, 11, 13, 14, 19 and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

6. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 305-3988, (for formal communications intended for entry)

Or:

(703) 305-3988 (for informal or draft communications, please label
"PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121
Crystal Drive, Arlington, VA. 22202, Sixth Floor (Receptionist).

**7. Any inquiry concerning this communication or earlier communications from the
examiner should be directed to Jamal A. Fox whose telephone number is (571) 272-
3143. The examiner can normally be reached on Monday-Friday 6:30 AM - 5:00 PM.**

If attempts to reach the examiner by telephone are unsuccessful, the examiner's
supervisor, Wellington Chin can be reached on (571) 272-3134. The fax phone
numbers for the organization where this application or proceeding is assigned are (703)
872-9306 for regular communications and (703) 872-9315 for After Final
communications.

Any inquiry of a general nature or relating to the status of this application or
proceeding should be directed to the receptionist whose telephone number is (703) 306-
0377.

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Jamal A. Fox
Jamal A. Fox

W. H. D.